

ABSTRACT

A reliable data communications protocol for the broadcast of long messages over a noisy medium, such as a frequency hopping communications link with multiple interferors. Long length messages are divided into a plurality of subpackets, each of which incorporates an error detection mechanism. A message integrity field is calculated based upon the contents of the subpackets, and is stored within one of the plurality of subpackets. The subpackets are transmitted two or more times. Each subpacket is stored by a recipient if received without error, and the recipient calculates a message integrity field based upon the stored subpackets. When the calculated message integrity field corresponds to the message integrity field received within the subpackets, the long message is deemed properly transmitted, reassembled from the plurality of subpackets, and processed appropriately.